

CLAIMS

WE CLAIM:

1. A test computer network for testing scalability of a distributed application to a target computer network, the test computer network comprising:
 - at least one test computer having thereon a plurality of bootable partitions for controlling the at least one test computer on a mutually exclusive time-shared basis; and
 - a bootable system within each of the plurality of a bootable partitions, each bootable system comprising:
 - an instance of the distributed application; and
 - a launcher for determining, when running, whether the bootable system is scheduled to be running, and for causing another bootable system on the same test computer to boot instead if the bootable system is not scheduled to be running.
2. The test network according to claim 1, wherein each bootable system further comprises a scheduler usable by the launcher for determining whether the bootable system is scheduled to be running.
3. The test network according to claim 1, wherein each bootable system further comprises server information usable by the launcher for retrieving a command file from a command server.
4. The test network according to claim 3, wherein the command file is usable by the launcher to cause diagnostic data to be sent to a diagnostic server.

5. The test network according to claim 4, wherein the diagnostic server and the command server reside on a single computing device.

6. The test network according to claim 1, wherein the instance of the distributed application comprises an instance of a data replication application, the test network further comprising a controller computer separate from the at least one test computer for exchanging data with the instance of the data replication application.

7. The test network according to claim 1, wherein each of the at least one test computers hosts the same number of bootable systems as each other of the at least one test computers.

8. A method of testing a distributed application for use in a target computer network using a test network having a plurality of test computers, each test computer having a plurality of bootable partitions, each bootable partition having therein a bootable system comprising an instance of the distributed application, the method comprising:

booting a selected one of the bootable partitions on a test computer;
running the instance of the distributed application of the bootable system associated with the selected bootable partition;

determining whether the instance of the distributed application of the bootable system associated with the selected bootable partition is currently scheduled to run; and

if the instance of the distributed application of the bootable system associated with the selected bootable partition is currently scheduled to run, allowing the instance to continue to run, and otherwise causing execution of a boot next routine to cause the selected one of the bootable partitions to shut down and to cause another bootable partition of the same test computer to boot.

9. The method according to claim 8, wherein the step of determining whether the instance of the distributed application of the bootable system associated with the selected bootable partition is currently scheduled to run comprises accessing a scheduler that maintains information regarding when the instance is scheduled to run.

10. The method according to claim 8, further comprising:
retrieving, while the selected one of the bootable partitions is running, a command file from a remote location containing instructions; and
implementing the instructions contained in the command file.

11. The method according to claim 10, wherein the step of implementing the instructions contained in the command file comprises:

retrieving diagnostic information regarding the state of the selected one of the bootable partitions; and

causing the retrieved diagnostic information to be transmitted to a remote location.

12. The method according to claim 8, wherein the distributed application is a distributed data replication application, and wherein the step of allowing the instance to continue to run comprises exchanging data between the instance of the distributed application and a remote computer.

13. An apparatus for testing a distributed application for use in a target computer network using a test network having a plurality of test computers, each test computer having a plurality of bootable partitions, each bootable partition having therein a bootable system comprising an instance of the distributed application, the apparatus comprising:

means for booting a selected one of the bootable partitions on a test computer;
means for running the instance of the distributed application of the bootable system associated with the selected bootable partition;

means for determining whether the instance of the distributed application of the bootable system associated with the selected bootable partition is currently scheduled to run; and

means for allowing the instance to continue to run if the instance of the distributed application of the bootable system associated with the selected bootable partition is currently scheduled to run, and for otherwise causing execution of a boot next routine to cause the selected one of the bootable partitions to shut down and to cause another bootable partition of the same test computer to boot.

14. The apparatus according to claim 13, further comprising:

means for retrieving, while the selected one of the bootable partitions is running, a command file from a remote location containing instructions; and

means for implementing the instructions contained in the command file.

15. The apparatus according to claim 14, wherein the means for implementing the instructions contained in the command file comprise:

means for retrieving diagnostic information regarding the state of the selected one of the bootable partitions; and

means for causing the retrieved diagnostic information to be transmitted to a remote location.

16. The apparatus according to claim 13, wherein the distributed application is a distributed data replication application, and wherein the means for allowing the instance to continue to run further comprises means for exchanging data between the instance of the distributed application and a remote computer.

17. A computer readable medium having thereon computer readable instructions for performing a method of testing a distributed software system for use in a target computer network using a test network having a plurality of test computers, each test computer having a plurality of bootable partitions, each bootable partition having therein a bootable system comprising an instance of the distributed software system, the computer readable instructions comprising instructions for:

booting a selected one of the bootable partitions on a test computer;

running the instance of the distributed software system of the bootable system associated with the selected bootable partition;

determining whether the instance of the distributed software system of the bootable system associated with the selected bootable partition is currently scheduled to run; and

if the instance of the distributed software system of the bootable system associated with the selected bootable partition is currently scheduled to run, allowing the instance to continue to run, and otherwise causing execution of a boot next routine to cause the selected one of the bootable partitions to shut down and another bootable partition of the same test computer to boot.

18. The computer readable medium according to claim 17, further comprising computer readable instructions for:

retrieving, while the selected one of the bootable partitions is running, a command file from a remote location containing instructions; and

implementing the instructions contained in the command file.

19. The computer readable medium according to claim 18, wherein the computer readable instructions for implementing the instructions contained in the command file comprise computer readable instructions for:

retrieving diagnostic information regarding the state of the selected one of the bootable partitions; and

causing the retrieved diagnostic information to be transmitted to a remote location.

20. The computer readable medium according to claim 17, wherein the distributed software system is a distributed data replication system, and wherein the computer readable instructions for allowing the instance to continue to run comprise computer readable instructions for exchanging data between the instance of the distributed software system and a remote computer.